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MCDONNELL DOUGLAS



U.S. DEPARTMENT OF LABOR
WORKPLACE STANDARDS ADMINISTRATION
BUREAU OF LABOR STANDARDS
MATERIAL SAFETY DATA SHEET

FORM NO. OSHA-20 (MODIFIED)
MAY 1971

MDC CONTROL NO. 519

dfm 519

SECTION I: MATERIAL AND MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME Columbia Ribbon & Carbon Mfg Co Inc.		EMERGENCY TELEPHONE NO. (714) 985-2719
ADDRESS (NUMBER, STREET, CITY, STATE AND ZIP CODE) 8855 Baker Avenue, Cucamonga, California 91730		
CHEMICAL NAME AND SYNONYMS Spirit Duplicating Fluid		TRADE NAME AND SYNONYMS Columbia Duplicating Fluid
CHEMICAL FAMILY Solvent	FORMULA	

SECTION II: HAZARDOUS INGREDIENTS*

PAINTS, PRESERVATIVES/SOLVENTS	%	TLV (UNITS)	ALLOYS AND METALLIC COATINGS	%	TLV (UNITS)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS Methyl Alcohol	92-98%		FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS H ₂ O	2-8%				
HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES*				%	TLV (UNITS)

SECTION III: PHYSICAL DATA

BOILING POINT (°F)	148°F	SPECIFIC GRAVITY (H ₂ O = 1) (@ 68°F)	0.798
VAPOR PRESSURE (mm Hg.)	77	PERCENT VOLATILE BY VOLUME (%)	
VAPOR DENSITY (AIR = 1)	1.11	EVAPORATION RATE (_____ = 1)	
SOLUBILITY IN WATER			

APPEARANCE AND ODOR
Colorless, alcoholic odor

SECTION IV: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED) 54°F Closed Cup 61°F Open Cup	FLAMMABLE LIMITS	Lel 6.0	Uel 36.5
EXTINGUISHING MEDIA Water, Carbon Dioxide, or dry chemical			
SPECIAL FIRE FIGHTING PROCEDURES			

UNUSUAL FIRE AND EXPLOSION HAZARDS

*PLEASE DO NOT USE GENERALIZATIONS, SUCH AS PETROLEUM HYDROCARBONS, ALCOHOL, KETONES.
USE SPECIFIC CHEMICAL NAMES, SUCH AS METHANOL, BENZENE, PERCHLOROETHYLENE.

SECTION V: HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE Acceptable maximum allowable concentration of vapor is 200 parts per million by volume of air for an 8 hour working exposure.

EFFECTS OF OVEREXPOSURE Prolonged or repeated contact without proper precautions may cause headache, dizziness, vomiting, skin irritation, eye irritation

EMERGENCY AND FIRST AID PROCEDURES

Skin: Wash with soap and water, apply ointment, petrolatum or lanolin

Eye: Wash with gentle flow of water for 15 minutes. Consult physician

Swallowing: Induce vomiting. Consult physician

SECTION VI: REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	

INCOMPATIBILITY (MATERIALS TO AVOID)

None

HAZARDOUS DECOMPOSITION PRODUCTS

None

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII: SPILL OR LEAK PROCEDURES**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**

Leaking packages must be moved to a safe place and spills promptly flushed away with water.

WASTE DISPOSAL METHOD**SECTION VIII: SPECIAL PROTECTION INFORMATION****RESPIRATORY PROTECTION (SPECIFY TYPE)**

Always use solvents with adequate ventilation.

VENTILATION	LOCAL EXHAUST	SPECIAL
	MECHANICAL (GENERAL)	OTHER

PROTECTIVE GLOVES

None under normal use.

EYE PROTECTION

None under normal use.

OTHER PROTECTIVE EQUIPMENT**SECTION IX: SPECIAL PRECAUTIONS****PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING**

RED LABEL - CAUTION: DO NOT DROP.

Keep away from fire, heat and open flame lights.

OTHER PRECAUTIONS

L. E. Thomas, Plant Manager

PREPARED BY

11/3/72
DATE